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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/628,385

07/29/2003

Soroush Ghanbari

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EXAMINER

VO, TUNG T

ART UNIT

PAPER NUMBER

2621

NOTIFICATION DATE

DELIVERY MODE

03/03/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/628,385	Applicant(s) GHANBARI ET AL.	
	Examiner Tung Vo	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10,15 and 18-23 is/are pending in the application.
- 4a) Of the above claim(s) 2,11-14,16 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-10,15 and 18-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 15 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In claim 15, "instructions" are treated as non-functional material such as writing a direction to go one place to another place or a description to tell a person do something stored in "a tangible computer-readable medium" is non statutory.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 3-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Jung (US 5,825,423) as set forth in the previous Office Action, dated 07/18/08.

In the remarks filed 12/15/2008, the applicant argues that Jung does not show all limitation of claim 1, and Jung does not show decoding of the concealment of lost or damaged motion vectors.

The examiner respectfully disagrees with the applicant. It is submitted claim 1 does not show any decoding process, and concealment of lost or damaged motion vectors is not referred

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to the step in the claim so it is not be considered as patentable weight. Therefore, the arguments are not persuasive. It is further submitted that Jung discloses a method of approximating a motion vector for an image block for concealment of a lost or damaged motion vector (fig. 2, minimum error is considered a lost or damage motion vector, the concealment is selecting the best motion vector that represent the macroblock), comprising the steps of: deriving (deriving is considered as detecting a set motion vectors on the basis of codewords #A, which is interpreted that motion vectors have been already computed and detecting a set motion vectors from the motion vectors) a first set of vectors from motion vectors of neighbouring blocks in the same frame (e.g. 214 of fig. 2, motion vectors are detected from neighboring blocks as candidate blocks included in search regions) and the corresponding block and its neighbouring blocks in one or more preceding and/or subsequent frames (e.g.214 of fig. 2; see figs 1A and 1B, MV1, MV2); deriving a set of candidate vectors (e.g. 216 of fig. 2, deriving is considered as detecting a set motion vectors on the basis of codewords #B, which is interpreted that motion vectors have been already computed and detecting a set motion vectors from the motion vectors) from one or more of motion vectors of neighbouring blocks in the same frame and the corresponding block and its neighbouring blocks in one or more preceding and/or subsequent frames (e.g. 216 of fig. 2); deriving an estimated motion vector from the first set of vectors (e.g. 214 and 316 of fig. 3); comparing the candidate vectors with the estimated motion vector (222 of fig. 2); and selecting one of the candidate vectors on the basis of similarity to said estimated vector (224 of fig. 2). In view of the discussion above, Jung anticipates the claimed invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-10, 18-19, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 5,912,707) as set forth in the previous Office Action, dated 07/18/08.

In the remarks filed on 12/15/2008, the applicant argues that Kim does not teaches (1) deriving an estimated motion vector from the first set of vectors, comparing the candidate vectors with the estimated motion vector and selecting one of the candidate vectors on the basis of similarity to said estimated vector as recited in claim 1, or (2) approximating the motion vector from one or more of the motion vectors from the first set or candidate set on the basis of the overall vector correlation as recited in claim 21.

The examiner respectfully disagrees with the applicant. It is submitted that Kim teaches a method of approximating a motion vector for an image block for concealment of a lost or damaged motion vector (200 fig. 1, note lost block containing error (damaged) based on motion vectors, col. 3, lines 5-19), comprising the steps of: deriving a first set of vectors from motion vectors (col. 3, lines 45-col. 4, line 7) of neighboring blocks in the same frame and the corresponding block and its neighbouring blocks in one or more preceding and/or subsequent frames (e.g. 200 and 210 of fig. 2, 211 of fig. 3); deriving a set of candidate vectors from one or more of motion vectors of neighbouring blocks in the same frame and the corresponding block and its neighbouring blocks in one or more preceding and/or subsequent frames (211 of fig. 3,

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col. 8-36); deriving an estimated motion vector from the first set of vectors (e.g. 211-213, L220 of fig. 3); comparing the candidate vectors with the estimated motion vector (e.g. 270 of fig. 2); and selecting one of the candidate vectors on the basis of similarity to said estimated vector (e.g. 270 of fig. 2), or (2) approximating the motion vector (Dmv) from one or more of the motion vectors from the first set or candidate set on the basis of the overall vector correlation (motion variance of motion vectors) (col. 3, lines 45-col. 4, line 36). In view of the discussion above, the claimed features are unpatentable over Kim.

7. Claims 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 5,912,707) in view of Henning (US 7,133,455 B2) as set forth in the previous Office Action, dated 07/18/08.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tung Vo/
Primary Examiner, Art Unit 2621